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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/757,642

01/14/2004

Yoshiharu Tajima

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10/06/2006

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EXAMINER

NGUYEN, TUAN HOANG

ART UNIT

PAPER NUMBER

2618

DATE MAILED: 10/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/757,642

Applicant(s)

TAJIMA, YOSHIHARU

Examiner

Tuan H. Nguyen

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed on 07/18/2006 with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maruyama (U.S PAT.6,816,731) in view of Li (U.S PAT. 6,711,172).

Consider claim 1, Maruyama teaches a radio base station comprising: a receiving section for receiving a packet via a radio transmission path (col. 1 lines 49-57); and a network interfacing section for routing the packet when a judgment result is true, and forwarding the packet to a radio base station when the judgment result is false, the radio base station forming the wireless zone adjacent to a wireless zone formed by a local station (col. 38 lines 45-64).

Maruyama does not explicitly show that a judging section for judging the packet on whether or not an address designating a transmitting end thereof is in a predetermined range of addresses that are different from the address allocated to a wireless zone formed by a local station and allocated to a wireless zone adjacent to said wireless zone.

In the same field of endeavor, Li teaches a judging section for judging the packet on whether or not an address designating a transmitting end thereof is in a predetermined range of addresses that are different from the address allocated to a wireless zone formed by a local station and allocated to a wireless zone adjacent to said wireless zone (col. 2 lines 4-13).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, a judging section for judging the packet on whether or not an address designating a transmitting end thereof is in a predetermined range of addresses that are different from the address allocated to a wireless zone formed by a local station and allocated to a wireless zone adjacent to said wireless zone, as taught by Li, in order to provide a method of routing network packets to a border router joining different network domains includes defining a range of addresses for the border router in a router forwarding table.

4. Claims 2 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruyama (U.S PAT.6,816,731) in view of Li (U.S PAT. 6,711,172) and further in view of Okajima et al. (U.S PUB. 2001/0018346 hereinafter, "Okajima").

Consider claim 2, Maruyama and Li, in combination, fails to teaches network interfacing section forwards a packet which has arrived from a destination of the received packet, to the radio base station forming the adjacent wireless zone.

However, Okajima teaches network interfacing section forwards a packet which has arrived from a destination of the received packet, to the radio base station forming the adjacent wireless zone (page 5 [0064]).

Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Okajima into view of Maruyama and Li, in order to provide a mobile communication system in which a mobile station and a plurality of base stations communicate with each other.

Consider claim 14, Okajima further teaches the radio base station further comprising a monitoring section for gleaning transmission performance of a packet that arrives at the radio base station forming the adjacent wireless zone from a destination of the received packet, wherein network interfacing section forwards the arriving packet only to a radio base station at which the transmission performance gleaned by monitoring section exceeds a predetermined threshold value (page 6 [0070]).

5. Claims 4, 6, 8, 10, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruyama (U.S PAT.6,816,731) in view of Li (U.S PAT. 6,711,172)

and Okajima et al. (U.S PUB. 2001/0018346 hereinafter, "Okajima") and further in view of Miyamoto et al. (U.S PUB. 2002/0002063 hereinafter, "Miyamoto").

Consider claim 4, Maruyama, Li, and Okajima in combination, fails to teaches network interfacing section forwards the packet via a link when the judgment result is false, the link being formed between the radio base station and the radio base station forming the adjacent wireless zone.

However, Miyamoto teaches network interfacing section forwards the packet via a link when the judgment result is false, the link being formed between the radio base station and the radio base station forming the adjacent wireless zone (page 9 [0184] and page 18 [0387]).

Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Miyamoto into view of Maruyama, Li, and Okajima, in order to provide base station control equipment, radio base station equipment, radio terminal equipment and a mobile communication system each being capable of setting transmitting power of a radio channel allotted anew to a new visit-zone to an appropriate value without changing a basic hardware construction.

Consider claim 6, Miyamoto further teaches network interfacing section forwards the packet via a path when the judgment result is false, the path being formed between the radio base station and the radio base station forming the adjacent wireless zone

(page 9 [0184]).

Consider claim 8, Miyamoto further teaches link is formed for each group of radio base stations individually forming adjacent wireless zones (page 1 [0002]).

Consider claim 10, Miyamoto further teaches network interfacing section cooperates with a base station controlling station for executing channel control relating to the wireless zone formed by the local station and its adjacent wireless zone, to determine a path to be used for forwarding a packet which has arrived from a destination of the received packet, to the radio base station forming the adjacent wireless zone (page 11 [0234]).

Consider claim 12, Miyamoto further teaches network interfacing section cooperates with a base station controlling station for executing channel control relating to the wireless zone formed by the local station and its adjacent wireless zone, to determine a path to be used for forwarding a packet which has arrived from a destination of the received packet, to the radio base station forming the adjacent wireless zone (page 11 [0234]).

6. Claims 3, 5, 7, 9, 11, and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruyama (U.S PAT.6,816,731) in view of Li (U.S PAT. 6,711,172)

and further in view of Miyamoto et al. (U.S PUB. 2002/0002063 hereinafter, "Miyamoto").

Consider claim 3, Maruyama and Li, in combination, fails to teaches network interfacing section forwards the packet via a link when the judgment result is false, the link being formed between the radio base station apparatus and the radio base station forming the adjacent wireless zone.

However, Miyamoto teaches network interfacing section forwards the packet via a link when the judgment result is false, the link being formed between the radio base station apparatus and the radio base station forming the adjacent wireless zone (page 9 [0184] and page 18 [0387]).

Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Miyamoto into view of Maruyama and Li, in order to provide base station control equipment, radio base station equipment, radio terminal equipment and a mobile communication system each being capable of setting transmitting power of a radio channel allotted anew to a new visit-zone to an appropriate value without changing a basic hardware construction.

Consider claim 5, Miyamoto further teaches network interfacing section forwards the packet via a path when the judgment result is false, the path being formed between the radio base station and the radio base station forming the adjacent wireless zone



(page 9 [0184] and page 18 [0387]).

Consider claim 7, Miyamoto further teaches link is formed for each group of radio base stations individually forming adjacent wireless zones (page 1 [0002]).

Consider claim 9, Miyamoto further teaches network interfacing section cooperates with a base station controlling station for executing channel control relating to the wireless zone formed by the local station and to the adjacent wireless zone, to determine a path to be used for forwarding a packet which has arrived from a destination of the received packet, to the radio base station forming the adjacent wireless zone (page 11 [0234]).

Consider claim 11, Miyamoto further teaches network interfacing section cooperates with a base station controlling station for executing channel control relating to the wireless zone formed by the local station and its adjacent wireless zone, to determine a path to be used for forwarding a packet which has arrived from a destination of the received packet, to the radio base station forming the adjacent wireless zone (page 11 [0234]).

Consider claim 13, Miyamoto further teaches network interfacing section cooperates with a base station controlling station for executing channel control relating to the wireless zone formed by the local station and its adjacent wireless zone, to

determine a link to be used for forwarding a packet which has arrived from a destination of the received packet, to the radio base station forming the adjacent wireless zone (page 11 [0234]).

Consider claim 15, Miyamoto further teaches the radio base station further comprising: a visiting base station determining section for determining one of the local station and the radio base station forming the adjacent wireless zone as a specific radio base station which is the one receiving a packet latest and/or receiving a packet at a highest level (page 9 [0185]); and a downstream packet transmitting section for judging whether or not the specific radio base station is the local station, and transmitting a packet transmitted from a destination of the received packet to the radio transmission path when the judgment result is true, and to the specific radio base station when the judgment result is false (page 9 [0184] and page 18 [0387]).

Consider claim 16, Miyamoto further teaches the radio base station further comprising: a downstream packet distributing section for distributing a packet transmitted from a destination of the received packet to the radio base station forming adjacent wireless zone (page 3 [0048]); and a downstream packet transmitting section for comparing the local station to the radio base station forming the adjacent wireless zone to judge whether or not the local station receives a packet latest at its receiving section and/or receives a packet at a highest level (page 9 [0185]), and transmitting the

packet transmitted from the destination of the received packet to the radio transmission path only when the judgment result is true (page 9 [0184] and page 18 [0387]).

7. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hugenberg et al. (U.S PAT. 6,714,545 hereinafter, "Hugenberg") in view of Abdo et al. (U.S PUB. 2004/0052257 hereinafter, "Abdo").

Consider claim 17, Hugenberg teaches an inter-network interfacing comprising: a network interfacing section for allowing the inter-network interfacing to physically interface with three networks or more in which routing is executed for each packet and to which different address are allocated (col. 6 lines 51-63).

Hugenberg does not explicitly show that an inter-network interfacing section for executing routing among the three or more networks via network interfacing section and forwarding to a specific network of the three or more networks a packet having a transmitting end with an address being not in a range of addresses allottable to terminals under the inter-network interfacing.

In the same field of endeavor, Abdo teaches an inter-network interfacing section for executing routing among the three or more networks via network interfacing section and forwarding to a specific network of the three or more networks a packet having a transmitting end with an address being not in a range of addresses allottable to terminals under the inter-network interfacing (page 22 [0135]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, an inter-network interfacing section for executing

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routing among the three or more networks via network interfacing section and forwarding to a specific network of the three or more networks a packet having a transmitting end with an address being not in a range of addresses allottable to terminals under the inter-network interfacing, as taught by Abdo, in order for automatically detecting the configuration of communication facilities.

Consider claim 18, Hugenberg teaches an inter-network interfacing comprising: a network interfacing section for allowing two networks in which routing is executed for each packet and to which different address are allocated to physically interface with a link laid between the inter-network interfacing and a node (col. 6 lines 51-63).

Hugenberg does not explicitly show that an inter-network interfacing section for executing routing between the two networks via said network interfacing section and forwarding a packet to the link, the packet being provided from one of the two networks and having a transmitting end with an address being not in a range of addresses allottable to terminals under the inter-network interfacing.

In the same field of endeavor, Abdo teaches an inter-network interfacing section for executing routing between the two networks via said network interfacing section and forwarding a packet to the link, the packet being provided from one of the two networks and having a transmitting end with an address being not in a range of addresses allottable to terminals under the inter-network interfacing (page 22 [0135]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, an inter-network interfacing section for executing

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routing between the two networks via said network interfacing section and forwarding a packet to the link, the packet being provided from one of the two networks and having a transmitting end with an address being not in a range of addresses allottable to terminals under the inter-network interfacing, as taught by Abdo, in order for automatically detecting the configuration of communication facilities.

8. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hugenberg et al. (U.S PAT. 6,714,545 hereinafter, "Hugenberg") in view of Abdo et al. (U.S PUB. 2004/0052257 hereinafter, "Abdo") as applied to claim 18 above, and further in view of Baker (U.S PAT. 6,333,938).

Consider claim 19, Hugenberg and Abdo, in combination, fails to teaches the inter-network interfacing section discriminates a moment synchronizing with a packet having a transmitting end with an address being not in the range of addresses; and network interfacing section outputs a signal and the moment to the link together, the signal indicating a sequences of packets forwardable from the two networks to the link.

However, Baker teaches the inter-network interfacing section discriminates a moment synchronizing with a packet having a transmitting end with an address being not in the range of addresses (col. 8 lines 28-59); and network interfacing section outputs a signal and the moment to the link together, the signal indicating a sequences of packets forwardable from the two networks to the link (col. 2 lines 4-18).

Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Baker into view of Hugenberg and Abdo, in order to provide a way to generate and synchronize control signals for the zoom port of a personal computer based on certain packet information that is contained in the packet header and data fields from a given video camera device.

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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10. Any response to this action should be mailed to:

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Commissioner for Patents

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan H. Nguyen whose telephone number is (571) 272-8329. The examiner can normally be reached on 8:00Am - 5:00Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Maung Nay A. can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information Egusa the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tuan Nguyen *T.N*  
Examiner  
Art Unit 2618

*Quochien B. Vuong* 9/29/06  
QUOCHIE B. VUONG  
PRIMARY EXAMINER